Case Study
Addressing Digital Accessibility throughout the Organization

White Paper Series
AT&T’s Corporate Accessibility Technology Office: An Industry Model
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Addressing Digital Accessibility throughout the Organization

A G3ict Case Study White Paper Series

September 2013
About G3ict
G3ict is an Advocacy Initiative of the United Nations Global Alliance for ICT and Development, launched in December 2006 in cooperation with the Secretariat for the Convention on the Rights of Persons with Disabilities at UN DESA. Its mission is to facilitate and support the implementation of the dispositions of the Convention on the Rights of Persons with Disabilities promoting e-accessibility and assistive technologies. G3ict participants include industry, the public sector, academia and organizations representing persons with disabilities. G3ict relies on an international network of ICT accessibility experts to develop practical tools, evaluation methods and benchmarks for States Parties and Disabled Persons Organizations to implement policies in support of assistive technologies and e-accessibility. Since inception, G3ict has organized or contributed to more than 90 awareness raising and capacity building programs for policy makers in cooperation with international organizations such as the ITU, UNESCO, UNITAR and the World Bank. G3ict co-produces with ITU the “e-Accessibility Policy Toolkit for Persons with Disabilities” (www.e-accessibilitytoolkit.org), which is widely used around the world by policy makers involved in the implementation of the Convention on the Rights of Persons with Disabilities. For additional information on G3ict, visit www.g3ict.org

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For aging adults and persons living with disabilities, as for most of the world population today, communications is key to achieve independent living, well-being and safety, and increased productivity, but mostly and more importantly, to fully participate in modern society. Communication technologies enable individuals to participate in social, educational and economic activities, retrieve information, receive warnings from government authorities in emergencies and conduct a number of daily tasks that require access to phone or web services. What is available to the general public is not always accessible to persons with disabilities and seniors. With reduced mobility, visual or hearing impairments or cognitive difficulties, fulfilling those essential tasks can become difficult, or impossible. 54 million Americans (according to the US Census Bureau) live with a disability, and more than half of our seniors experience some form of disability.

While the law in the US has for several decades addressed the issue of living with disabilities, issues become increasingly complex with the digitalization of our society: it is the responsibility of the private sector to implement the necessary measures to be compliant with the law, and fulfill its role of good citizen. The telecommunications and information industry is particularly well placed to promote research and development in this domain.

Among the telecommunications companies, AT&T has implemented an exemplary proactive policy, both internally and vis a vis the general public, to provide tools and services that give access to users of all abilities to modern technologies. The launching in 2012 of its Corporate Accessibility Technology Office (CATO), described in this White Paper, is one more example of this policy.

G3ict is grateful to AT&T for sharing its experience in the White Paper: promoting good practices is essential to advancing accessibility for all.

Axel Leblois
Executive Director, G3ict
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AT&T’s Corporate Accessibility Technology Office: An Industry Model

Introduction
In 2012, AT&T announced a groundbreaking new accessibility initiative: the creation of its Corporate Accessibility Technology Office (CATO). The purpose of CATO is to lead AT&T’s efforts to meet its obligations to make products and services accessible to persons with disabilities. CATO serves as a central hub for accessibility-related issues, working with business units throughout the company to assess the accessibility implications of new projects and provide counsel on the design and development of products and services across the enterprise. While CATO’s primary responsibility is to ensure compliance with accessibility regulations for all of AT&T’s products and services, its very existence also serves the wider purpose of raising awareness of disability-related issues and creating a culture of accessibility throughout the company.

While AT&T’s record on accessibility already makes the company an industry leader, the creation of CATO represents yet another significant step forward. The main innovation behind CATO is its role as a centralized body responsible for evaluating projects proposing new or modified products and services for accessibility-related issues; this introduces more accountability surrounding accessible product design and creates a mechanism for the company to coordinate accessibility procedures and practices across multiple business units. CATO holds great promise for AT&T, and it represents a model for other corporations to follow. The remainder of this paper discusses CATO’s structure, impact and its future.

Why Accessibility Matters
Over the few last decades, the US has taken the lead in promoting change for persons with disabilities, starting with the Americans with Disabilities Act in the early 90s, section 508 to promote equality of access, and more recently the 21st Century Communications and Video Accessibility Act. It is no surprise with the surge of digital communications usage that for the first time, access to communication and information technologies for persons with disabilities takes a front seat in policy development. But providing accessible products and services is not only an imperative for full participation of persons with disabilities in a modern society. It is also a major economic opportunity for the industry.

Demographics data shows the extent to which accessibility has become an economic imperative. Over 57 million Americans are living with some kind of disability, representing 19% of the civilian population and 50% of adults aged 65 and older; and, obviously these numbers are only expected to increase in the coming years due to an aging population and the influx of returning disabled veterans. Americans with disabilities already control $220 billion in annual discretionary spending power, and their share of the economy will only become more significant over time. To tap into this considerable market, companies must make real efforts to ensure that their products are accessible to all.

The market for accessible technology is especially significant in the telecommunications industry. Adults over the age of 50, who are disproportionately affected by disabilities such as hearing loss, are the only wireless segment with market penetration growth potential. This demographic is also 2.8 times more loyal to their wireless carriers than the youth market.
For AT&T, the development of accessible technology represents not only an attempt to better serve a valuable market, but also a driver of innovation that keeps the company competitive. Efforts to make telecommunications technology accessible for people with disabilities have led AT&T to use some of its innovations—such as its WATSON™ speech recognition technology—in new ways, and to develop innovative new solutions such as U-Verse Easy Remote, Mobile Accessibility and other accessible offerings.

For all of these reasons, and through a multitude of efforts, AT&T has shown a consistently strong commitment to accessibility—both for its customers and for its employees with disabilities. But these accomplishments were not accidental. They were instead the result of deliberate efforts to recruit and work with internal and external experts to develop excellent policies, products and services.

Internally, the company has created an accessible application process and has targeted recruitment efforts towards people with disabilities, including disabled veterans. Once employed, AT&T offers its employees with disabilities the same diverse and high potential professional development opportunities as the broader workforce. AT&T believes that diverse viewpoints and perspectives enable AT&T to better serve its customers and employing people with disabilities is an important part of that effort.

Externally, the company maintains strong relationships with a wide variety of disability advocacy groups that provide ongoing feedback and guidance. The company also convenes panels of external accessibility experts through the AT&T Consumer Advisory Panel and the AT&T Advisory Panel on Access and Aging. Both panels meet multiple times during the year and interface with AT&T’s senior leadership to provide broad guidance on corporate accessibility policy as well as on specific products.

“CATO is a world-class center for developing accessible technology, helping AT&T fulfill its mission of bringing the benefits of modern telecommunications to everyone, including our customers with disabilities.”

Chris Rice, Chief Accessibility Officer

“Establishing the Corporate Accessibility Technology Office (CATO) inside AT&T is a testament to our ongoing commitment to ensure that AT&T’s products and services are accessible to all of our customers. AT&T believes strong communities and strong businesses go hand-in-hand, one supporting the other. Through programs like CATO, together we can develop solutions that meet the needs of our customers and communities.”

Charlene Lake, Senior Vice President—Public Affairs & Chief Sustainability Officer
The Inner Workings of the CATO

Mission and Leadership
CATO is AT&T’s latest effort to ensure that the disability community has full access to modern telecommunications technology. The core mission of CATO is to lead AT&T’s efforts to address the needs of persons with disabilities in the design and development of products and services across the enterprise and throughout the product design process. CATO partners with each business unit to advance AT&T’s efforts to make accessible and usable products, services, applications and networks.

CATO also performs outreach to the disability community to get feedback from the people who use the company’s products and services. The organization operates under the leadership of Christopher Rice, AT&T Chief Accessibility Officer, and Mark Balsano, CATO’s Executive Director. They are supported by a team of over 30 employees. CATO’s creation has encouraged a broader discussion about and commitment to accessibility throughout the company.

Structure
How CATO Supports Accessibility
Since its creation, CATO has become an integral part of AT&T’s wide-ranging accessibility efforts. CATO has already processed over 11,000 requests for accessibility review, and over 500 projects have undergone or are currently undergoing a detailed accessibility analysis. CATO touches a wide variety of projects that drive forward AT&T’s commitment to making the technology accessible to people with disabilities. Thus, in addition to assisting the business units in advancing AT&T’s efforts to make products and services accessible to and usable by persons with disabilities, CATO serves additional functions within the company.

Coordination
CATO serves as a center for coordination of accessibility efforts across the entirety of AT&T. With so many parts of the organization engaged in accessibility efforts— from AT&T’s Human Factor Labs, to its Advisory Panel on Access and Aging, to its customer service department, and more—CATO is uniquely positioned to communicate with all of AT&T’s various business units. It provides essential information sharing functions between these units to spread best practices and prevent duplication of efforts. Relatedly, CATO serves as a centralized repository of knowledge about accessibility-related issues at the center of AT&T. While multiple units within AT&T have been engaged in improving accessibility at AT&T for decades, CATO is now uniquely positioned to serve as a resource for information about accessibility for business units throughout the company.

Training
Training has also become a critical part of CATO’s role within the company. Many employees are not educated on issues relating to accessibility and disabilities and must be introduced to those issues and taught how to handle them. To that end, CATO has helped develop training to improve how AT&T employees think about and interact with customers with disabilities and with products and services that will be used by those customers. This training helps employees involved in the design and development of products and services think about accessibility at the beginning of the design and development cycle and helps employees that interact with customers with disabilities better serve the needs of those customers.

Awareness
The very existence of CATO also increases awareness about accessibility issues within the rest of the company. The creation of CATO sends a strong message to other parts of the organization that AT&T cares deeply about accessibility and is willing to invest in its commitment to the disability community. This encourages everyone in the company to think about accessibility and consider these issues in their daily work. Anecdotally, during conversation with employees at AT&T, we have heard of numerous situations where business units expressed a newfound interest and understanding of accessibility.

Outreach
Finally, CATO serves as a center for outreach to the disability community. AT&T has long maintained strong relationships with several disability and advocacy organizations—including G3ict—in order to gain the input of the disability community in identifying areas for improvement. While a variety of business units will continue to perform outreach, CATO’s open-door policy to the disability community will help ensure that AT&T’s efforts continue to be a model for the industry.

Role of the Chief Accessibility Officer
Christopher Rice is AT&T’s first Chief Accessibility Officer, appointed to the newly created position in December 2012. The Chief Accessibility Officer is responsible for ensuring that AT&T has the processes and procedures in place to facilitate compliance with Sections 255, 716, 717, and 718 of the Communications Act and other disability regulations. More broadly, the CAO also takes leadership on accessibility issues in general, providing the issue with a face and a voice, and serving as an advocate for accessibility throughout the company.
A CATO Employee’s Perspective

Matt Myrick: Accessibility Solutions Engineer, AT&T: I’ve been hard of hearing since birth, and I grew up intimately aware of the need for technology that could adapt to me, rather than expecting me to adapt to it. I have always eagerly looked forward to the next accessible technology products that open up the world for people with hearing loss and other types of disabilities.

My experiences led me to develop a passion for accessible technology. Prior to joining the CATO organization, I worked for AT&T Relay Services for nine years, managing the company's State Relay contracts. With CATO, my responsibility as an Accessibility Solutions Engineer is to work with project managers for various business units throughout the development cycle of their projects to analyze new and existing products, services, applications and networks. I provide recommended solutions to improve accessibility and usability, while still developing a product, service, application or network that meets FCC requirements and customer needs. For instance, we’ve recently been working to add voice-over and improved color-contrast ratios to one of our mapping applications so that it is more accessible for persons with low vision.

During my work with both AT&T Relay Services and at CATO, I have experienced AT&T’s commitment to accessibility first-hand. In less than six months, I’ve already worked on over 37 different accessibility projects at CATO. I know that this company cares deeply about the disability community, and it demonstrates this commitment by not only providing equal opportunities for employees with disabilities like me, but also by working to improve the lives of our customers.

I joined the CATO team full time just a few months after AT&T announced the creation of CATO. I was excited about the formation of this new organization, and it has made me more confident than ever that AT&T will remain at the forefront of developing the latest and most innovative technologies to allow people with disabilities to experience the benefits of modern communications technology.

In addition to playing a key role in providing our customers with accessible products and services, the primary benefit I see arising from CATO is the organization’s ability to engage and educate project managers across business units who might not otherwise think about accessibility issues. On a daily basis, CATO’s work encourages AT&T employees to consider accessibility from the beginning of the product design and development cycle. Not only does this result in better accessible products, it positions AT&T as an industry leader.

I am proud to be a member of the AT&T Corporate Accessibility Technology Office and excited for the opportunities that it will bring to our company and our customers today and well into the future.
Moving Forward: A New Frontier in Accessibility

While CATO has already made great strides that were discussed in the previous sections, as the organization continues to grow, it also will look to address the following goals:

Greater Integration with Business Units
There are several projects currently under consideration that could increase CATO’s role across business units and facilitate the creation of a culture of accessibility that touches all parts of AT&T. While they have not yet begun or received approval, they provide insight into what CATO’s role could look like in the future. One project being considered is the development of a series of trainings on accessibility-related issues. Another project being considered is the development of a uniform set of internal standards related to accessibility that can be integrated with pre-existing policies of each business unit. While AT&T already goes to great lengths to support the hiring and retention of employees with disabilities, CATO could play a crucial role in promoting uniform standards across the entire company. These projects could potentially further strengthen AT&T’s already strong culture of accessibility and underscore its commitment to the disability community, both outside the company and within.

External Collaboration:
In addition to a growing role within AT&T, CATO plans to increase its role in conducting outreach to external groups, including original equipment manufacturers (OEMs) and disability organizations. With regard to OEMs, CATO will serve as a liaison between AT&T and the manufacturers on issues related to accessibility. While AT&T’s cannot control decisions made internally by OEM, CATO will increasingly serve as an advocate for incorporating accessibility technology into mobile product design and a source of information to help educate OEMs.
Case Study: AT&T Website and Brand Accessibility

Accessible website design necessitates careful attention to color selection, as low-vision users often have difficulty perceiving text that is does not adequately contrast against the background color. Recently, AT&T went through the process of reviewing its website to ensure that the use of blue, gray and orange text did not appear against background colors that were too similar in shade.

Shortly after its creation, CATO addressed these complaints by contacting AT&T’s brand team to advocate for closer attention to color contrast issues during the brand design process. As it turned out, much of the problematic text was actually noncompliant with the company’s branding specifications, which called for more strongly contrasted text to be used against the background colors in question. Thus, in response to CATO’s queries, AT&T’s brand team identified new colors for the website, addressing both the accessibility and branding problems at once. The brand team is currently working with other units of AT&T to change the website colors.

This process produced two additional benefits as well: first, CATO educated the brand team on the accessibility implications of color selection and drafted related web accessibility guidelines, ensuring that the department will approach future branding efforts with this issue already in mind. Second, CATO’s collaboration with the brand team created a positive relationship between these two units of AT&T. Such relationships are key to CATO’s mission of serving as a central authority on disability-related issues that can reach out all units of the company.

“Working with CATO has really opened me up to a whole new way of thinking when it comes to project design. With their help, I’m incorporating accessible technology into my projects from the outset rather than just retrofitting them at the end of the design process.”

Debbie Anderson, Senior Tech Manager, AT&T Centers Tools and Technology
Conclusion

The creation of CATO represents a significant advancement in the company’s already strong efforts to ensure that its customers with disabilities have full access to the latest telecommunications technologies. By creating a team that brings together accountability and expertise on accessibility in one office, AT&T has created an organization that has the potential to have a substantial impact on the rest of the company and its customers with disabilities. It also presents a model for other companies seeking to improve their accessibility practices.

“AT&T has long been a leader in understanding and embracing the value of diversity and inclusion in all facets of our business. That commitment is reflected in how we treat employees, work with vendors, support our communities and serve our customers. CATO is the logical extension of that commitment, and promises to enhance the lives of people with disabilities everywhere.”

Debbie Storey, Senior Vice President—Talent Development & Chief Diversity Officer

AT&T’s Corporate Accessibility Technology Office works to improve accessibility on products and services such as:

- Web pages
- Customer service processes
- Mobile devices
- Telecommunications services
Bios of a Few CATO Employees

A long-time employee of Southern Bell/BellSouth/AT&T, Marcee McCarthy first learned about CATO when a network application she developed as part of a different AT&T business unit went through the CATO review process. Following her experience as a client of CATO, she joined the CATO organization and now serves in the role of evaluating the accessibility of AT&T’s network. Marcee’s eight year old son, Brendan, has several disabilities, so she personally understands how AT&T’s building of accessible products, services, websites and an accessibility-supportive network are critical to people living with disabilities.

Kendra Cox works for AT&T as an Accessibility Solutions Engineer for CATO and is also involved in the CATO Outreach Team that was developed to gather information directly from individuals with disabilities about their experience with AT&T products and services. Kendra’s background is in Vocational Rehabilitation Counseling, and she previously worked with people with visual impairments and assisted them with gaining the resources and training they needed to maintain their job or gain employment. Kendra is interested in further exploring how technology can be modified and developed so that any person who has a disability can have equal access to resources and technology and live their life as independently and fully as possible.

Dr. Aaron Bangor is the Lead Accessible Technology Architect at AT&T, where he conducts research and promotes solutions for making technology usable by all. Previously, he worked in the Human Factors Engineering Group of AT&T Labs. He earned a Ph.D. in Human Factors Engineering from Virginia Tech, currently holds 15 patents and serves as the Vice-Chair of the Texas Governor’s Committee on People with Disabilities. He is active in the area of standards, including national and international standards for accessibility.
Case Study: AT&T’s Corporate Accessibility Technology Office: An Industry Model

Avalyn Jackson is the Lead Compliance Analyst at AT&T’s Corporate Accessibility Technology Office. She is very proud to work at AT&T and to have been involved with CATO from the ground up. She has been working at AT&T in Accessibility for over 10 years and has never seen another company show as much corporate responsibility in this segment as AT&T currently does.

John Herzog began working for CATO in August 2013. He has been a user of screen readers and other assistive technologies for nearly twenty years, and he is excited to help AT&T improve the usability of its products for people with disabilities. Prior to his employment with AT&T, John graduated from the University of Michigan law school and worked for the Federal Communications Commission (FCC). While employed with the FCC, John assisted the Commission in implementing various sections of the 21st Century Communications and Video Accessibility Act.

Over the course of her 14 years with AT&T, Diane spent 9 years in Corporate Compliance, where she managed AT&T’s Section 255 Compliance Program. She joined CATO in November 2012 and evaluates products and services for accessibility for customers who may have a disability. She is also the CATO Trainer, and she developed courses for employees on Disability Awareness and Achieving Product Accessibility.
Case Study: AT&T’s Corporate Accessibility Technology Office: An Industry Model

Gillian Piner holds a PhD in human factors psychology from Rice University. Her research and dissertation focused on designing an accessible voting system for use by blind and low vision voters. She continues to apply accessibility and usability principles to a range of technology through her work with CATO.

Over the course of her 17 year tenure with AT&T, Sandy has been given the opportunity to create teams and implement processes across the firm including the AT&T Contract Management Organization and AT&T ForHealth. Her role within CATO brings together her Legal/Regulatory, Product and Six Sigma experience.

Velvet Webb is an Accessibility Solutions Engineer with AT&T’s Corporate Accessibility Technology Office. Velvet joined AT&T in January 2013 after serving the State of Texas for 15 years. In her position with the State, Velvet was heavily involved in electronic accessibility, ensuring that Texas citizens with various disabilities were able to access the information that they needed from state agencies. She is currently serving on the Mayor’s Committee for People with Disabilities in the City of Leander, Texas.

Gillian Piner holds a PhD in human factors psychology from Rice University. Her research and dissertation focused on designing an accessible voting system for use by blind and low vision voters. She continues to apply accessibility and usability principles to a range of technology through her work with CATO.
Testimonials

“Through the establishment of CATO, AT&T has evolved its accessibility efforts from a series of ad hoc successes into a mature programmatic model, where metrics drive strategy and where attention to accessible design and processes is tightly integrated into the company’s strategic planning process and business units’ activities. This is, in fact, the only way a company can successfully address this market and set of consumer needs, and yields effectiveness, efficiency, consumer loyalty and employee pride. I’m proud to have had a role in this best-in-the-industry initiative.”

Larry Goldberg, Director, Carl and Ruth Shapiro Family National Center for Accessible Media at WGBH
“TDI commends AT&T for its Corporate Accessibility Technology Office. It reflects the serious commitment AT&T makes every day to addressing the needs of its customers with disabilities in design, development and provision of products and services for their daily communication and information needs. This Office will ensure that the commitment is upheld over time through actions by key personnel at AT&T. Furthermore, AT&T understands that providing access is not a one-time thing, but a process that lasts through the life cycle of the product and service that meets the needs of every customer with a disability. With this commitment, the future will be brighter for AT&T and its customers with disabilities. Thank you, AT&T!”

Claude Stout, Executive Director, Telecommunications for the Deaf and Hard of Hearing, Inc. (TDI)
“The work that the CATO team does to make sure that we are doing the right thing is so important to our customers and to AT&T. Working with them was so rewarding because they made me think about how my project would impact individual people rather than just a large group of customers. It’s easy to forget to think about that when you have 100 million subscribers. I have a new perspective, even outside of work, on how we can make others’ lives just a bit easier. So in the end, I realized that I got much more out of working with the CATO team than just what was covered in my project. “

Adam Gavin, Senior Product Marketing Manager, Voice and Prepaid Products, Marketing-Mobility, AT&T